

```
#include <stdio.h>
```

```
#include <stdlib.h>
```

```
#include <ctype.h>
```

```
#include <string.h>
```

```
const char *input;
```

```
char lookahead;
```

```
void error() {
```

```
    printf("Error parsing input\n");
```

```
    exit(1);
```

```
}
```

```
void match(char expected) {
```

```
    if (lookahead == expected) {
```

```
        lookahead = *input++;
```

```
    } else {
```

```
        error();
```

```
    }
```

```
}
```

```
void expr();
```

```
void term();
```

```
void factor();
```

```
void expr() {
```

```
    term();
```

```
    while (lookahead == '+' || lookahead == '-') {
```

```
        char op = lookahead;
```

```
        match(lookahead);
```

```
        term();
```

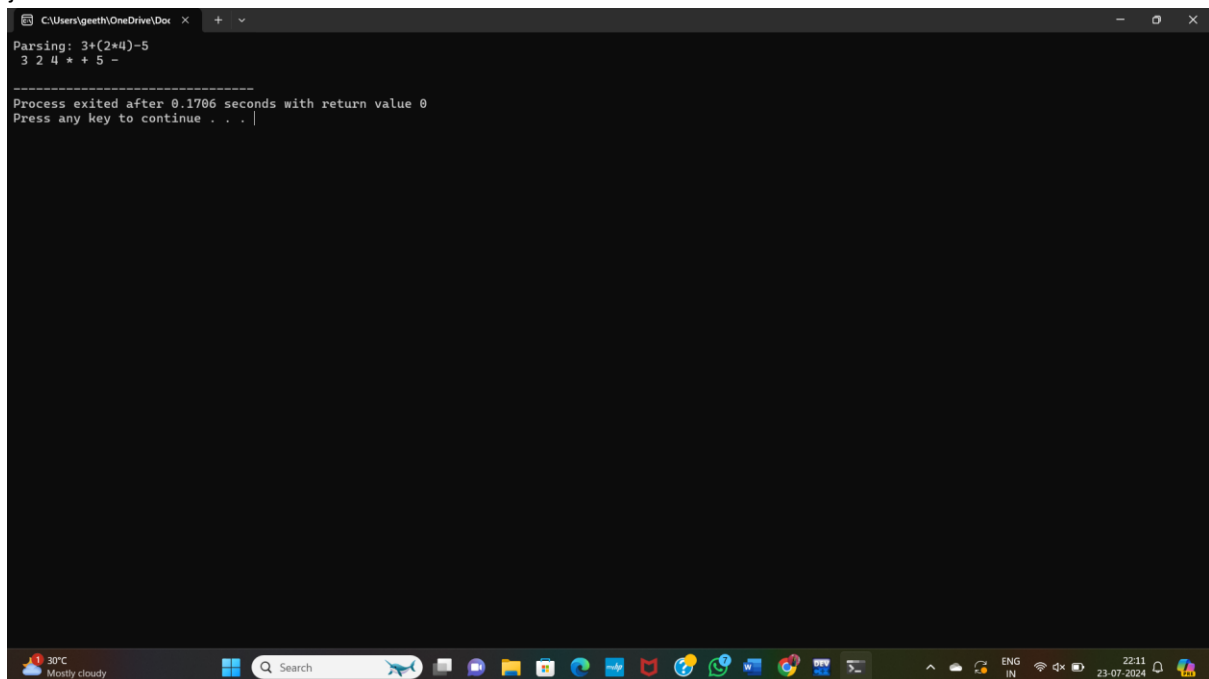
```
    printf(" %c", op);  
}  
}
```

```
void term() {  
    factor();  
    while (lookahead == '*' || lookahead == '/') {  
        char op = lookahead;  
        match(lookahead);  
        factor();  
        printf(" %c", op);  
    }  
}
```

```
void factor() {  
    if (isdigit(lookahead)) {  
        printf(" %c", lookahead);  
        match(lookahead);  
    } else if (lookahead == '(') {  
        match('(');  
        expr();  
        match(')');  
    } else {  
        error();  
    }  
}
```

```
void parse(const char *inputString) {  
    input = inputString;  
    lookahead = *input++;  
    expr();  
}
```

```
    if (lookahead != '\0') {  
        error();  
    }  
    printf("\n");  
}  
  
int main() {  
    const char *inputString = "3+(2*4)-5";  
    printf("Parsing: %s\n", inputString);  
    parse(inputString);  
    return 0;  
}
```



```
C:\Users\geeth\OneDrive\Doc  
Parsing: 3+(2*4)-5  
3 2 4 * + 5 -  
-----  
Process exited after 0.1706 seconds with return value 0  
Press any key to continue . . . |
```